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September 9, 2005

Beth O'Donnell
Executive Director
Public Service Commission
211 Sower Blvd.
Frankfort, KY 40601

RECEIVED

SEP 09 2005

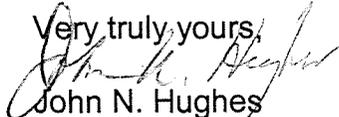
Case No. 2005-00148

PUBLIC SERVICE
COMMISSION

Dear Beth:

Northern Kentucky Water District files its responses to the Commission's Second Data Request of July 29, 2005. A copy of this Response has been delivered to the Attorney General's Office of Rate Intervention.

If there are any questions about this, please contact me.

Very truly yours,

John N. Hughes

Attorney for Northern Kentucky
Water District

Attachments

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SEP 09 2005

PUBLIC SERVICE
COMMISSION

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC COMMISSION**

**NORTHERN KENTUCKY WATER DISTRICT'S RESPONSE TO THE
COMMISSION STAFF'S SECOND INFORMATION REQUEST**

Q1. Provide all ordinances and resolutions of Campbell County and Kenton County Fiscal Courts that address the current level of compensation for members of NKWD's Board of Commissioners.

A1. Witness: Barrow. Please see Tab 1.

Q2. Provide all ordinances and resolutions of Campbell County and Kenton County Fiscal Courts in which those legislative bodies authorize NKWD to provide health insurance coverage for members of its Board of Commissioners or the pay their health insurance premiums.

A2. Witness: Barrow. There are none.

Q3. Provide all ordinances and resolutions of NKWD's Board of Commissioners that authorize health insurance coverage for members of NKWD's Board of Commissioners or the payment of their health insurance premiums.

A3. Witness: Barrow. At the time of the merger of the former Campbell County KY Water District and former Kenton County Water District No.1 the joint board planning for the merger agreed to cover commissioners' health insurance. There is no ordinance or resolution.

Q4. For each member of NKWD's Board of Commissioners who was paid a salary in excess of \$3,600 in calendar year 2004, provide documentary evidence of his or her completion of 6 or more hours of certified water district commissioner training for calendar year 2004.

A4. Witness: Barrow. Please see Tab 4.

Q5. For each attorney that NKWD employed in calendar year 2004 or currently employs, provide written evidence that the Kenton and Campbell County Judge/Executives have approved his or her employment and the payment of his or her compensation from water district funds.

A5. Witness: Barrow. Please see Tab 5.

- Q6. Provide a copy of the May 2004 "Asset Management Program Final Report".
- A6. Witness: Harrison. Please see Tab 6. The District is only providing one copy to the Commission, since it has been previously filed with the Commission. The Attorney General stated that he did not need a copy, since he already has one.
- Q7(a). State the final cost of Asset Management Program.
- A7(a). Witness: Harrison. The final cost of the Asset Management Program was \$300,371.
- Q7(b). Provide all the invoices related to the Asset Management Program.
- A7(b). Witness: Harrison. Please see Tab 7B.
- Q7(c). Identify the portion of the cost of the Asset Management Program that was incurred in the test-period. State whether this amount was expensed. If expensed, identify the account to which it was recorded.
- A7(c). Witness: Harrison. No portion of the cost of the Asset Management Program was incurred in the test-period.
- Q8. Provide an itemized estimate of cost that NKWD will incur to complete the Depreciation study by the end of 2005.
- A8. Witness: Barrow. Please see Tab 8.
- Q9. Provide all NKWD Budget instructions, assumptions, directives, manuals, policies and procedures, timeline, and descriptions of budget procedures.
- A9. Witness: Barrow. The District does not have a budget manual. The Vice President of Finance issues a timeline in July of each year setting out the schedule for preparing the annual Operations and Maintenance Budget, Operating Capital Budget, and five year major capital budget. For a copy of the schedule for the past year please see Tab 9. The District operates under a Zero Based budgeting approach. Thus each year every expense account is reviewed from day one. The District does not use trending as its only method of determining the next year's budget number. While five years of trending data is reviewed and analyzed, the New Year budget is based upon need, cost, and justification.

The Finance Department, along with the HR Manager, prepares a worksheet to calculate estimated payroll and benefits for each employee based on current actual numbers and projected increases for the new year. The worksheets are sent to each department Vice President, which shows actual numbers for the past five years, an estimate of the current year, and a column for the departments to enter their request for the new year. In the next phase, the VP of each department meets with the Vice President of Finance and Controller to review their request and the documentation to support their request. This phase often takes numerous meetings. Next, the Vice President of Finance and Controller meet with the President/CEO to review the entire budget request. If the President/CEO approves the planned budget, then the VP of Finance presents the complete package to the Board of Commissioners for their review and approval. Often, the VP of Finance will again meet with the department Vice Presidents to address additional issues that the President/CEO has questioned.

Q10. Describe the process that NKWD uses to plan and approve construction projects.

A.10. Witness: Harrison. The Northern Kentucky Water District uses its Asset Management Program as a guide, which is enclosed as Tab 6 and was adopted by its Board of Commissioners, to plan and prioritize construction projects. Projects are budgeted through the NKWD 5 year Capital Budget that is approved annually by its Board of Commissioners. Individual projects approved as part of the 5 year Capital Budget are then designed and bid. The bid award is then considered and approved for each project by the Board of Commissioners. Additionally, projects that require a Kentucky Public Service Commission Certificate are submitted to the Commission for approval prior to any issuance of award to the project contractor.

Q11(a). For each construction project that NKWD has commenced since January 1, 1997 through December 31, 2004, provide the following in the format set forth in Schedule 1:

- (1) Project number
- (2) Project title and description
- (3) Annual actual cost
- (4) Annual actual budgeted cost
- (5) Variance between actual cost and annual original budgeted cost in dollars
- (6) Variance between actual cost and annual original budgeted cost in percentage
- (7) Percentage of total construction budget that proposed project comprises for the budgeted year
- (8) Total actual project cost
- (9) Total budgeted project cost
- (10) Variance between total actual project cost and total budgeted project cost
- (11) Date the original budget projected the project to start

- (12) Date the original budget projected the project to be completed
- (13) Date construction of project actually commenced
- (14) Date construction of the project was actually completed

A11(a). Witness: Harrison. Please see Tab 11A. The District does not account for individual project expenses on an annual basis in a tabulated format. Additionally, the District does not budget project completion dates in an individual project tabulated format.

Q11(b). For each project in which a variance between actual and budgeted cost occurred or in which a delay in its start or completion occurred, describe the variance or delay and the reasons for such variance or delay.

A11(b). Witness: Harrison. Please see Tab 11B. The District often uses the final payment date for the Date actual end as a basis to track project costs and status. In some cases the project construction completion date may be significantly earlier than the date of final payment for all project related expenses. These type of delays typically occur when the District is making payment as part of a State or City project in which the water line work is being coordinated.

Q12. Refer to NKWD's Petition, Exhibit A at pages 2-3 "5 Year Capital Funding Plan – Draw Schedule & Calendar Year Cash Flows for 2005 through 2010." Provide in a similar format NKWD's 5 Year Capital Funding Plan for 2000 through 2004 with annual comparisons of budgeted to actual amounts.

A12. Witness: Barrow. The District does not account for individual project expenses in this manner.

Q13(a). Provide a comparison of NKWD's monthly operating budgets to the actual results, by account, for each of the following calendar years: 2001, 2002, 2003, and 2004. NKWD's response shall include comparisons for the following operating revenue accounts:

- 1) Metered Water Revenue – Sales to Residential Customers
- 2) Metered Water Revenue – Sales to Commercial Customers
- 3) Metered Water Revenue – Sales to Industrial Customers
- 4) Metered Water Revenue – Sales to Public Authorities
- 5) Metered Water Revenue – Sales to Multiple Family Dwellings
- 6) Metered Water Revenue – Sales to Bulk Loading Stations
- 7) Private Fire Protection
- 8) Sales for Resale
- 9) Forfeited Discounts
- 10) Rents from Water Properties
- 11) Other Water Revenue

A13(a). Witness: Barrow. The District does not track actual versus budget by these individual categories. Please see Tab 13 A for the report the District does have to compare revenue. The District's budget process looks at the total revenue actually received in previous years and also the cost of service studies that have been performed in the last four years to estimate total revenue.

Q13(b). Provide, for each yearly account variance that exceeds 5 percent, a detailed explanation for the variance.

A13(b). Witness: Barrow. Please see Tab 13B.

Q14(a). Provide a comparison of NKWD's monthly operating budgets to the actual results, by account, for each of the following calendar years, 2001, 2002, 2003, and 2004. NKWD's response shall include comparisons for the following operating expense accounts.

A14(a). Witness: Barrow. Please see Tab 14A.

Q14(b). Provide, for each yearly account variance that exceeds 5 percent, a detailed explanation for the variance.

A14(b). Witness: Barrow. Please see Tab 14B.

Q15. Provide all correspondence between NKWD and Black & Veatch regarding the preparation or review of the cost-of-service study and the multi-year rate proposal contained in NKWD's Petition.

A15. Witness: Barrow. All discussions took place in workshop meetings held by the District and the consultants working on the rate case.

Q16. Explain why NKWD has not placed its proposed multi-year methodology in the form of a proposed rate schedule or tariff.

A16. Witness: Howe. The proposal is a mechanism for annual adjustments to NKWD's expenses and revenues. Because it is a mechanism for the annual adjustment, it does not seem to fall within the definition of a rate or a condition of service, which would require a tariff.

Q17. Provide all studies and analyses that NKWD has performed or commissioned on the use of multi-year rate cases.

A17. Witness: Barrow. The District has not commissioned any studies for the multi-year proposal, except for the analysis provided by Black & Veatch as part of the overall review of the District's rate needs and the benefits of the multi-year rate mechanism. The results of the Black & Veatch analysis are reflected in the proposal submitted with the Application.

Q18. List all cases before state public utility regulatory commissions in which Peggy L. Howe has testified and identify, for each case, the subject matter of her testimony.

A.18. Witness: Howe. I have testified in the following rate cases:

<i>Case</i>	<i>Regulating Body</i>	<i>Subject</i>
2003-00224	Kentucky PSC	NKWD Rate Case
2002-00105	Kentucky PSC	NKWD Rate Case
42083	Indiana URC	City of Bloomington Utilities Water Rate Case

I also served as an expert witness on behalf of the City of Indianapolis with regard to valuation studies.

Q19. State whether Ms. Howe conducted a review of Kentucky statutory and decisional law on rate-making practices prior to the filing of her written testimony. If Ms. Howe conducted such review, describe the nature and extent of this review.

A19. Witness: Howe. I have not performed a review of Kentucky statutory and decisional law.

Q20. State whether Ms. Howe in preparing her written testimony conducted any review or inquiry into the Kentucky Public Service Commission's legal authority to authorize the proposed multi-year rate methodology.

A20. Witness: Howe. I have not conducted a review of the Kentucky Public Service Commission's legal authority to authorize the multi-year rate methodology.

Q21(a). State the number of wastewater and water utilities that Black & Veatch currently represents.

A21(a). Witness: Howe. At any given point in time, Black & Veatch will be engaged across a variety of projects for water and wastewater utilities. Exhibit Q-2 of my pre-filed testimony identifies the relevant experience of Black & Veatch - EMS. This experience does not include other divisions of Black & Veatch that also perform engineering and other services for water and wastewater utilities.

Q21(b). Of the number set forth in Item 21(a), state how many of those utilities currently employ multi-year rate periods.

A21(b). Witness: Howe. A survey has not been conducted. Based on the simple polling of my colleagues, as noted in my pre-filed testimony, multi-year rate periods are not without precedent in the municipal industry.

Q21(c). Of the number stated in Item 21(b), state how many are subject to the regulation of a state public utility regulatory commission.

A21(c). Witness: Howe. A survey has not been conducted.

Q22. For each utility listed on page 5 of Ms. Howe's written testimony:

Q22(a) Describe the multi-year rate methodology that it uses.

A22(a). Witness: Howe. The public-owned utilities listed on page 5 all perform multi-year financial planning, consistent with AWWA guidance, which identifies the anticipated revenues and revenue requirements expected over the applicable study period. Rates are developed to recover cost of service to recognize the combined results of financial planning, AWWA-based cost of service allocations, and local community policies and considerations.

Q22(b). Describe the regulatory review process to which it is subject.

A22(b). Witness: Howe. As noted on page 4 of my testimony, all the utilities surveyed for use on page 5 are drawn from the municipal community and are regulated through local agencies and other governmental entities. However, both Philadelphia and St. Louis MSD both use a quasi-public service commission approach, which mirrors the structure and purpose typical of state-sponsored public service commissions. For instance, Philadelphia provides for the filing of direct testimony, and allows for discovery and interveners in its process, which is managed by an appointed Hearing Officer. In St. Louis, a chartered commission oversees the rate case process.

Q22(c) Provide the statutory or decisional authority that permits the utility to use a multi-year rate methodology.

A22(c). Witness: Howe. For the public-owned utilities listed on page 5, the authority permitting the multi-year rate approach will be granted by local commissioners, aldermen, or other municipal decision makers and will vary by community. In Philadelphia, the Hearing Officer is appointed a selection committee consisting of the Mayor, the President of City Council, and the City. In St. Louis, the rate commission was established by the District charter, which was enabled by the Missouri constitution

Q23(a). Explain the relevance of the group of utilities to which Ms. Howe refers at pages 4 and 5 of her written testimony.

A23(a). Witness: Howe. The utilities listed on page 5 of my written testimony demonstrate that a multi-year approach is not without precedent in the municipal water and wastewater utility industry.

Q23(b). State whether, in Ms. Howe's opinion, this group is representative of all water and wastewater utilities in the United States.

A23(b). Witness: Howe. The utilities shown on page 5 of my written testimony were the result of a sample and are not necessarily representative. In my opinion and based on my experience, the issues facing utility management today are forcing consideration of alternative approaches to strike balance between efficient and effective financial management, regulatory requirements, and customer impacts.

Q23(c). State whether Ms. Howe has conducted any research upon the average approved rate period for water utilities of NKWD's size within the United States.

A23(c). Witness: Howe. Such a survey has not been conducted.

Q23(d). If Ms. Howe has conducted research upon the average approved rate period for water utilities of NKWD's size within the United States, state her findings and provide a copy of her research.

A23(d). Witness: Howe. Not Applicable

Q24. Provide the California Public Utilities Commission's Standard Practice U-34-W "Calculating Weather Normalized Means Test (Pro Forma) Rate of Return."

A24. Witness: Howe. The California Public Utilities Commission's Standard Practice U-34-W is provided in Tab 24.

Q25. State whether Ms. Howe's reference in her written testimony to the "Rate Case Plan for Class A Water Utility, General Rate Applications" is to the California Public Utilities Commission's Decision 04-06-018 on June 9, 2004 in Proceeding R0309005.

A25. Witness: Howe. Yes, the reference was to the California Public Utilities Commission's Decision 04-06-018 on June 9, 2004 in Proceeding R0309005 .

Q26(a). List all state utility regulatory commissions, other than the California Commission, that permit the use of multi-year test periods for rate-making purposes.

A26(a). Witness: Howe/Lee. At this time, aside from California, we are not aware of other regulatory commissions that permit multi-year test periods.

Q26(b). For each state utility regulatory commission listed, provide the statute, administrative regulation, administrative decision or other pronouncement that authorizes or approves of the practice of multi-year test periods for rate-making purposes. (If the material is generally available on the Internet or published in a well-recognized reporter, a citation to the document may be supplied in lieu of a paper copy.)

A26(b). Witness: Howe Not Applicable based on A26a.

Q27. State and quantify the benefits of NKWD ratepayers from its proposed use of a multi-year rate methodology in this case. State all assumptions and show all calculations used to derive the quantification of benefits.

A27. Witness: Howe. A formal cost-benefit analysis has not been performed. We anticipate the look-back process to be a simplified review of limited aspects of the District operations. However, the economic benefit of this proposal is dependent on how the look-back process is ultimately defined, including the timing and depth of associated reviews.

Q28(a). State whether Ms. Howe in preparing her written testimony reviewed or examined the reliability and accuracy of NKWD's budgeting and forecasting processes.

A28(a). Witness: Howe. Yes, the budgeting process was examined.

Q28(b). If Ms. Howe examined the reliability and accuracy of NKWD's budgeting and forecasting processes, describe the nature and extent of her review.

A28(b). Witness: Howe. The approach was reviewed for appropriateness and reasonableness. The District uses a "zero-based" budgeting approach for operational expenses, which means District planners are required to assess funding needs to perform at the targeted level of service rather than trend incremental funding estimates from the prior year expense levels. The capital budget is based on the master planning document, which reflects the needs of the District as filed with the PSC. Based on my experience, both of these approaches are appropriate and reasonable.

Q29. State whether Ms. Howe agrees that when using the proposed methodology the reliability and accuracy of NKWD's budgeting and forecasting processes are critical factors in obtaining reasonable rates that reflect the actual cost of service.

A29. Witness: Howe. Yes, the reliability and accuracy is important to the process. This importance is reflected by the inclusion of a look-back mechanism to true-up actual results, and by the 5% cumulative threshold in total revenue requirements that triggers the need for filing a new rate case.

Q30. State whether Ms. Howe agrees that a critical assumption upon which the proposed methodology is based is that NKWD's budgeting and forecasting processes are reliable and accurate.

A30. Witness: Howe. Please refer to A29.

Q31. Describe the types of information that NKWD proposes to file annually if the Commission approves its proposed multi-year rate methodology.

A31. Witness: Howe. As described on pages 8-9 of my written testimony, and documented in Exhibit Q-4, the look-back process is expected to be performed between March and July. At the conclusion of that analysis, a report will be filed comparing cost projections used for rate development and actual results. This report will indicate what adjustments are proposed, if any, to true-up rates. The report will also perform the cumulative % variance test to indicate whether or not a rate case filing is required.

Q32. Describe the review process that NKWD proposes that the Commission use when reviewing annual rate filings.

A32. Witness: Howe. By approving the initial multi-year plan, the Commission will be endorsing rates proposed for the initial test year (approached consistent with a traditional rate case) as well as the subsequent years. The annual look-back process will be the vehicle by which the adequacy of that original plan is evaluated, true-up adjustments are proposed, and the need to submit a revised rate case is judged. Within the look-back report, the Commission will have the opportunity to review variances and recommendations for adjustments required to ensure costs are appropriate and allocated equitably in the next rate implementation. The look-back report should be available in July, enabling nearly 6 months of review and negotiation time prior to January implementation of the next rate cycle.

Q33(a). State whether NKWD reviewed and considered the Union, Light, Heat and Power Company's (ULH&P) Accelerated Main Replacement Program Rider (AMRP) when developing its multi-year rate methodology.

A33(a). Witness: Barrow. Yes.

Q33(b). If NKWD reviewed and considered ULH&P's AMRP Rider when developing its multi-year rate methodology, explain why NKWD chose not to use the AMRP Rider methodology.

A33(b). Witness: Barrow. Representatives of the District met with Commission staff several times prior to developing a multi-year rate proposal. The ULH&P rider was discussed with staff. It was indicated to the District by the staff that the Rider was approved only on an experimental basis and that it was unlikely to be approved in future applications. Because of the staff's lack of support for that mechanism, the District sought other similar types of mechanisms.

Q34. Assume that the Kentucky Public Service Commission approved the proposed multi-year rate methodology subject to conditions. State NKWD's position on each condition listed below:

Q34(a). A public hearing must be held for each annual revision.

A34(a). Witness: Barrow. The District does not oppose such a hearing, but believes it should be held only if one were requested by a customer.

Q34(b). Public notice of the proposed annual adjustment must be made at or shortly before the filing of the annual adjustment.

A34(b). Witness: Barrow. The District does not oppose such notice, but believes it should be an abbreviated notice, without a list of all rates and rate classifications affected, so that the cost of the annual adjustment is not unnecessarily inflated.

Q34(c). The Commission would have a review period of at least 60 days prior to the effective date of the proposed adjustment. The review could be extended upon good cause.

A34(c). Witness: Barrow. The District has no objection to a review period. The purpose of the annual adjustment is to allow the District the opportunity to recover known increases in its operations quickly and efficiently. The benefit to the District and the Commission diminishes to the extent that each month of lost revenue is counter productive to the purpose of the annual mechanism and each month of review increases the overall cost of the filing.

Q34(d). Annual adjustments based upon additional or new construction projects would reflect the cost only of construction projects for which a Certificate of Convenience and Necessity have been issued.

A34(d). Witness: Barrow. That would be true for projects that require a CCN. But also included in each year's adjustments would be the cost of projects that qualify as ordinary extension.

Q35. Refer to NKWD's Petition, Exhibit N at 8 in which NKWD proposes to adjust retail metered water sales by \$296,835 to reflect the addition of 900 new connections.

Q35(a). Identify the line extension(s) and the number of new connections resulting from those extensions.

A35(a). Witness: Howe. The 900 Customers reflect the District's historical growth patterns, including both infill and line extensions.

Q35(b). Explain how this proposed adjustment differs from the adjustment that the Commission rejected in Case No. 2002-00105² as a "budgetary adjustment based upon projected customer growth."

A35(b). Witness: Howe. This adjustment is a proforma adjustment based on approximately 1% historical growth in residential and commercial accounts.

Q36(a). Provide a schedule detailing all test year expenditures related to the application filed in this current proceeding. Provide in the schedule the nature and amounts of all charges along with a copy of vendor invoices. The invoices should contain detailed descriptions of the services, the amount of time billed for each service, and the hourly billing rate. Identify the account number and title of which each amount was charged.

A36(a). Witness: Barrow. Please see Tab 36A.

Q36(b). Provide the anticipated total cost of the case upon completion. The projected amount should be detailed by type of service and vendor with supporting documentation for each.

A36(b). Witness: Barrow. The District has no way of calculating the total cost. The cost will depend on the number of questions and number of data requests from the commission and interveners. The best estimate the District has at this point is \$200,000 to \$250,000 based on the total cost spent to date as shown in Tab 36C.

Q36(c). Provide a monthly update of the schedule requested in Item 36(a) showing all of the cost incurred as of that date. Include the supporting detailed vendor invoices as requested in Item 36(a).

A36(c). Witness: Barrow. Please see Tab 36C

Q37. Refer to NKWD's Response to Commission Staff's First Information Request, Item 1. Included on "Detail List of Employees and Payroll Information" are the new positions of Administrative Assistant and Instrumentation Technician.

Q37(a). If these positions have been filled, provide the date on which the employees were hire, the actual annualized salary and the actual benefit information.

A37(a). Witness: Buhrlage. Scott Poole was hired as an Instrumentation Technician on July 29, 2004, at an annualized salary of \$29,328. The actual benefit information is:

Health Insurance	\$13,027.80	annually
Dental Insurance	\$550.00	annually
Life Insurance	\$93.00	annually
Disability Insurance	\$245.00	annually

Q37(b). If the positions have yet to be filled, state when NKWD expects to hire employees to fill these positions.

A37(b). Witness: Buhrlage. There has been a delay in filling the Administrative Assistant position. At the present time, the potential hire date is before December 1, 2005. However, the District is currently utilizing an employee from a temporary service.

Q38. Refer to NKWD's Response to Commission Staff's First Information Request, Item 8(d).

Q38(a). State whether the pro forma employee pensions and benefits expense reflects the 10.98 percent employer contribution rate that became effective July 1, 2005.

A38(a). Witness: Barrow. Yes

Q38(b). If the expense does not reflect the 10.98 percent employer contribution rate, state the effect of the new rate on test-period operations and provide all work papers and calculations used to determine this effect.

A38(b). Witness: Barrow. Not Applicable

Q39. In Case No. 2003-00224, the Commission reduced payroll taxes and employee pensions and benefits to remove the portion that should be capitalized as payroll overhead. Explain why NKWD did not propose a similar adjustment in this proceeding.

A39. Witness: Barrow: This was an oversight. The amount that was capitalized during 2004 is \$190,022.02.

Q40. State whether NKWD agrees with the Commission's finding in Case No. 2003-00224⁴ that the provision of health insurance coverage for members of NKWD's Board of Commissioners that was greater than that provided to other part-time employees was improper and that the costs related to that coverage should be disallowed for rate-making purposes.

A40. Witness: Barrow. The District does not agree. The Board of Commissioners have determined that health insurance coverage will be provided to any board member.

Q41. Refer to NKWD's Petition, Exhibit B at 6 "Five Year Capital Funding Plan (Long-Term Bond Debt added to 2006 Bond Issue)." Provide a schedule that separately shows each bond series that comprises the column "Total Existing Long-Term Debt"

A41. Witness: Barrow. Please see Tab 41 for a CD containing the schedule.

Q42. Refer to NKWD's Response to Commission Staff First Information Request, Item 4. For each item listed in the table attached hereto as Schedule 3, provide a complete description of the expenditure and all supporting invoices.

A42. Witness: Barrow. Please see Tab 42.

- Q43. Refer to NKWD's Response to Commission Staff's First Information Request, Item 4. For each item listed in the table attached hereto as Schedule 4, provide a complete and detailed description of the engineering service provided and a copy of all supporting invoices. State whether the service will be required to be performed in the future and the anticipated date that the service will be required to be performed.
- A43. Witness: Barrow. While some of the actual services performed will not continue into 2005, there will be other services needed for other plan projects. The District uses these contractors on a regular basis to provide needed engineering services. Please see Tab 43 for supporting documents.
- Q44. Refer to NKWD's Response to Commission Staff's First Information Request, Item 4. For each item listed in the table attached hereto as Schedule 5, provide a complete and detailed description of the legal service provided and all supporting invoices. State whether the service will be required to be performed in the future and the anticipated date that the service will be required to be performed.
- A44. Witness: Barrow. The majority of these fees are for the Board's attorney services. The District would anticipate that these fees will continue and possibly could increase depending on the nature of the legal work needed. Please see Tab 44 for supporting documents.
- Q45. At paragraph 17 of its Petition, NKWD states that "[t]here have been no extraordinary events that would distort the year end statements." State whether NKWD considers the acquisition of Taylor Mill's water distribution system and its customers to be an extraordinary event. Explain.
- A45. Witness: Barrow. The District acquired Taylor Mill in March of 2004. It began booking revenues and expenses from those customers in March 2004. Given the timing of the acquisition and the relatively small number of customers, the acquisition had no extraordinary impact on the District's operations.
- Q46. Provide NKWD's Proposal Tariff (Exhibit M to NKWD's Petition) in electronic format on a computer disk in Microsoft Word 97 format.
- A46. Witness: Barrow Please see Tab 46 for the CD.
- Q47. Explain why NKWD proposes to delete Sheet No. 4, Item No. 3 of its current tariff.

A47. Witness: Barrow. The District has deleted this, pending the outcome of the Cross Connection case 2004-00309.

Q48. Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 5, Item No. 13. Explain how an estimated usage will be calculated.

A48. Witness: Lofland. There are two options that could be utilized to calculate and estimated usage. 1) If the customer already has service with us we would use their previous history to calculate an estimated usage based on the number of days. 2) If the customer is a new customer we would obtain readings a week apart and calculate an estimated usage.

Q49. Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 5, Item No. 14 which refers to a fine.

Q49(a). Identify and describe the nature of this fine.

A49(a).Witness: Lofland. Remove "any fine that may be imposed" from Sheet No. 5, Item No. 14.

Q49(b). Identify the provision of NKWD's Proposed Tariff that sets forth the amount of this fine.

A49(b). Witness: Lofland. See Question & Answer 49(a).

Q50. Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 7, Section IV : Miscellaneous Service Fees.

Q50(a).Identify the provision of NKWD's Proposed Tariff in which "service charge" is defined.

A50(a).Witness: Lofland. Please see Answer 50(c).

Q50(b).If no provision of NKWD's Proposed Tariff defines service fees, define service charge and state when NKWD would apply this charge.

A50(b).Witness: Lofland. A "service charge" will be applied to a customer account if the water service has been disconnected for non-payment of bill. Further, the service charge will only be applied if a work-order has been created and completed for disconnection or service.

Q50(c). Provide cost justification information for the proposed service charge.

A50(c). Witness: Lofland. The "service charge" is applied to help recover the operation and maintenance costs incurred when creating and carrying out a work order resulting from a non-payment of bill. Please refer to SECTION IV – MISCELLANEOUS SERVICE FEES.

Q51. Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 8, Section VI, Item 5.

Q51(a). State whether NKWD notifies the customer that a district representative will be coming to read his meter so that access can be made available.

A51(a). Witness: Lofland. Yes, the District does notify the customer by letter requesting access to the meter in order for it to be read. Please see Tab 51A.

Q51(b). State the length of the notice that NKWD provides a customer before disconnecting his service.

A51(b). Witness: Lofland. The notification gives a customer 7 to 10 days to contact us to schedule the meter to be read or the service would be disconnected.

Q51(c). Describe the fees, if any, that a customer must pay before NKWD will restore his service.

A51(c). Witness: Lofland. If the service is disconnected for no reading the District does not charge during normal business hours to have the water turned back on as long as a reading is obtained. If the request is made after hours the normal overtime charge is required.

Q52. Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 10, Section IX, Type 1 – Underground Leaks, 3rd Paragraph. The last sentence states "The leak will be based on the customer's average bill plus one half of the lost water due to the leak." State whether this sentence correctly states NKWD's intentions.

A52. Witness: Lofland. Yes, the leak adjustment will be based on the customer's average bill plus one half of the lost water due to the leak.

Q53. Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 10, Section IX, "Type 2- Unknown Leaks Resulting in a High Consumption," 2nd bullet point. Explain how a customer can state the reason for the elevated consumption if the leak is unknown.

A53. Witness: Lofland. The statement is requiring the customer to submit a letter requesting the adjustment and stating that the high consumption was investigated and the origin for the elevated usage was not found and the customer has no known reason for the high consumption

Q54 Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 10, Section IX Type 2 – Unknown Leaks Resulting in High Consumption, 4th Bullet Point. State whether NKWD agrees that permitting exceptions to this rule may permit an opportunity for discrimination.

A54. Witness: Lofland. NKWD does not feel that permitting exceptions would permit an opportunity for discrimination. NKWD feels that in fact allowing exceptions would provide a better level of service to our customers in reviewing the situation on an individual case basis. Applying the excess of 200% of the average consumption allows the District to have some control of those customers that may abuse or take advantage of the tariff, but with the exceptions it also allows the District to work with customers.

Q55. Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 11, Section X, Item No. 1.

Q55(a). State the criteria necessary for NKWD to waive the relocation charge.

A55(a). Witness: Harrison. The District's current practice is to waive the fee and does not object to changing the word "may" to "will", provided no more than one service connection is required to be relocated per existing meter located inside the customer's premise.

Q55(b). Explain why NKWD would not waive the charge for all eligible customers.

A55(b). Witness: Harrison. NKWD will waive the charge for all eligible customers.

Q55(c). State whether NKWD would agree that the phrase "may waive" creates the potential for discrimination against certain customers.

A55(c). Witness: Harrison. NKWD will waive the charge for all eligible customers.

Q56. Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 11, Section X, Item No. 3.

Q56(a). Explain the statement that "at no time will the district be responsible for any piping making connection to the meter".

A56(a). Witness: Harrison. The District is only responsible for the meter and meter couplings. The District cannot control the type of piping the customer has used for their internal plumbing including the piping from the point of service and the meter. Therefore, the District's responsibility for maintenance and any resulting failure should be limited to the meter and meter couplings only.

Q56(b). State whether this language should be revised to limit NKWD's responsibility to piping on the customer's side of the meter.

A56(b). Witness: Harrison. No, the language should not be revised because the District should not be responsible for piping between the customer's point of service located at the curb stop valve near the public right-of-way and the inside meter coupling because the District cannot control the type of piping the customer has used.

Q57. Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 16, Section XVII, fourth paragraph. While NKWD proposes to change the reconnection fee to a service charge, this paragraph refers to a reconnection charge. State whether NKWD is proposing to charge a reconnection charge and a service charge.

A57. Witness: Harrison. No, The District is not proposing to charge a service charge. Only the reconnection charge will apply.

Q58. Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 21, Section XIX-A (6). State whether hydrants that do not meet the standards for fire protection are painted or marked in some manner to alert fire fighters that the hydrant does not meet the standards.

A58. Witness: Harrison. The local fire departments are responsible for painting and/or marking fire hydrants including any color codes that identify the flow available for a particular hydrant.

Q59. Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 23. State the criteria that NKWD proposes to use for waiving the deposit for fire hydrants.

A59. Witness: Harrison. The District proposes to waive the deposit for entities that meet the criteria of being governmental type groups such as cities, counties, school boards, fire departments and other similar groups.

Q60. Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 24, Section XXII, 3rd Paragraph which provides that "[t]his tariff supersedes any existing special contract for the provision of private fire protection services". Describe the notice that NKWD has provided to customers with such contracts of the proposed revisions to their agreements with NKWD.

A60. Witness: Harrison. The District will provide notice to customers with such special contracts of the termination of their agreements with NKWD upon approval of the District's revised Tariff by the Commission. This notice will include a copy of their existing agreement and the appropriate new Tariff language. District personnel contact information will be provided to the customer for the purposes of answering any questions.

Q61. Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 25, Section XXII.

Q61(a). State the amount of the meter investigation charge.

A61(a). Witness: Harrison. The amount of the meter investigation charge is based upon actual time spent reviewing the cause of unauthorized use of a private fire protection service based upon the District's Invoice Billing Policy.

Q61(b). Provide cost justification for the meter investigation charge.

A61(b). Witness: Harrison. The meter investigation charge is based upon the District's Invoice Billing Policy and will vary based upon actual time spent. The District should be reimbursed for these actual charges necessitated by a customer's unauthorized use of a private fire protection service.

Q62. Refer to NKWD's Petition, Exhibit M, Proposed Tariff, Sheet No. 25, Section XXII. Explain how NKWD determine that 21 times the retail service rate was the appropriate charge.

A62. Witness: Harrison. The District's charge was established at 21 times the retail service rate because most private fire line mains are 6 inches in diameter and most by-pass meters are 5/8 inches in diameter. The equivalent meter ratio established in the AWWA M1 Manual establishes a ratio of 21 for a 6-inch meter as compared to a 5/8 inch meter. Since it is impossible to measure the flow through the fire service main without a fully metered system, this table was utilized to establish a reasonable charge for unauthorized usage.

The District's revised Corrected M, Proposed tariff, Sheet No. 25, Section XX11, dated June, 30 1995, inadvertently listed the charge for unauthorized usage as \$10 per 100 cubic feet. The correct language for Sheet No. 25, Section XX11, Meter Investigation Charge: paragraph two, 1st sentence should read:

If water has been used for other than a verified fire fighting purpose or testing, the customer will be charged for the estimated amount of usage at a rate that is 21 times the retail rate listed in Section II.

Q63. State whether in NKWD's opinion the proposed multi-year rate mechanism will lessen the Commission's oversight over utility rates. Explain.

A63. Witness: Barrow. No. In fact it will probably increase oversight. Instead of a detailed review of expenses and revenues every two to three years based only on a 12 month historical period, this proposed mechanism gives the Commission the opportunity to review revenues and expenses every year based on the current year's figures. Not only will the Commission have more frequent reviews, it will have more current information on which to base its decisions.

Q64. At page 3 of his written testimony, Ron Barrow states that the proposed multi-year rate methodology "would allow the district to finance its projects without a series of rate cases which add to the cost of service and are reflected in increased customer bills."

Q64(a). State whether NKWD has determined the amount of savings if the multi-year rate proposal is approved.

A64(a). Witness: Barrow. The District has experienced rate case expenses in the \$300,000 range. This is the estimated cost for consultants and preparation work to file and complete a rate case. Assuming that the annual review of the multi-year filing is a simplified rate review, the District would expect to reduce its outside consultant expenses to \$100,000 to \$150,000. The base savings should be between \$150,000 and \$200,000 per rate case. Since the District would need to file a rate case every two years over the next five, the total estimated consultant's savings would be between \$300,000 and \$400,000. The total savings to the District would also include District's staff time, which is not tracked or booked as rate case expense. This savings would equal or exceed the consultant's time and expense.

Q64(b). If NKWD has derived the amount of rate cost savings, state the amount, show the calculations of these savings and state all assumptions used to make these calculations.

A64(b). Witness: Barrow. Please refer to Tabs 36A and 36C for the cost to date on a rate case which is still not finished.

Q64(c). If NKWD has not derived the amount of rate cost savings, explain why not.

A64(c). Witness: Barrow. While we feel the response to A64(a) represents a reasonable expectation of avoided cost, we do not have a determination of the cost of the look-back process. This ultimately is dependent on the approved terms of the look-back process.

Q65. Describe the measures that Northern Kentucky has implemented to control its rate case expense.

A65. Witness: Barrow. The District does as much in-house work as possible and bids consultants services for cost of service study every five to six years. In fact, no District labor is shown as part of the rate cost.

Q66(a). State whether, as a means of controlling its rate case expense, NKWD employs a bidding process for its outside consultants.

A66(a). Witness: Barrow. Yes.

Q66(b). If NKWD employs a bidding process for its outside consultants, describe the process.

A66(b). Witness: Barrow. The District issued an RFP for Services to perform and defend a cost of service study in 1998. The District will again issue an RFP next year for this service. The District will also be issuing an RFP for Fiscal Agent Services in year 2006. In addition, the District issues an RFP for Bond Attorney, Insurance Coverage, and Auditing services every three years, with the option to renew for an additional two years. In the case of Cost of Service and Fiscal Agent, RFP is issued every five to seven years.

Q66(c). If NKWD does not employ a bidding process for its outside consultants, explain why not.

A66(c). Witness: Barrow. Not Applicable.

Q67. Explain why Northern District has projected that a cost of service study should be filed in its future rate case filings.

A67. Witness: Barrow: 807 KAR 5:001(10)(6)(u).

Q68. At page 16 of his written testimony, Richard Harrison states that the AWWA M-1 Manual's equivalent meter ratio is 21 for a 6-inch meter as compared to a 5/8 inch meter.

Q68(a). State the page number of AWWA M-1 Manual on which this ratio is found.

A68(a). Witness: Harrison. This ratio is found on page 67.

Q68(b). Explain how NKWD's proposed revisions to its fire protection rates meet the intent of cost based rates.

A68(b). Witness: Harrison. The District has determined that the by-pass meter for private fire protection lines is the best way to meet the intent of cost based rates without requiring a fully master metered private fire protection line. Customers who have no unauthorized usage are not charged for fire protection usage, which is provided at no direct cost to all customers. Customers with unauthorized usage have an estimated bill established and are given the opportunity to correct the conditions that lead to unauthorized usage prior to being required to convert to a fully master metered private fire service.

Q68(c). State whether detector meters measure the volume of water that flows through the device.

A68(c). Witness: Harrison Yes, detector meters are standard meters that measure the volume of water that flows through the by-pass line.

Q68(d). Explain in detail how usage will be estimated for customers whose detection meters show that water has been used. Provide all calculations and state all assumptions used to determine the usage.

A68(d). Witness: Harrison. The District's meter reader will obtain the total consumption registered on the by-pass meter. Any authorized fire protection usage submitted by the customer will be deducted from the quarterly reading. The net volume will be multiplied by 21 to determine the estimated volume of usage that flowed through the un-metered private fire line. The appropriate cost from the District's rates will be applied for the estimate volume to determine the amount of the bill.

Q68(e). Describe in detail the physical connection of the 5/8-inch detection meters on a 6-inch line. Provide a diagram of a typical connection.

- A68(e). Witness: Harrison. The 6-inch main is tapped with a $\frac{3}{4}$ inch threaded fitting before the Detector Check valve as shown on the diagram that is enclosed as Tab 68. A copper connection is made to connect a section of $\frac{3}{4}$ inch type K Copper pipe to the corporation stop. A short section of $\frac{3}{4}$ inch type K Copper pipe is constructed and ties into the District's standard meter setting that includes; a $\frac{5}{8}$ inch by $\frac{3}{4}$ inch meter, a $\frac{3}{4}$ inch angle valve, a $\frac{3}{4}$ inch yoke el, a $\frac{5}{8}$ inch by $\frac{3}{4}$ inch yoke bar, a meter crock and the lid and ring. Another short section of $\frac{3}{4}$ inch type K Copper pipe is constructed from the meter setting into another $\frac{3}{4}$ inch threaded fitting that is then tapped into the 6-inch main at a location that is after the Detector Check valve as shown on the diagram that is enclosed as Tab 68. A diagram of the typical connection is enclosed as Tab 68.
- Q69. Explain how the proposed multi-year rate methodology will reduce the amount of NKWD staff time devoted to rate-making matters. This response should include a comparison of the time currently expended for rate applications during a three-year period and the time projected for rate case matters using the proposed methodology and the calculations and assumptions used to determine the time presently expended on rate applications and the time that NKWD estimates expending under the proposed methodology.
- A69. Witness: Howe. Savings are assumed based on anticipated changes to simplify the rate case process by engaging in one thorough rate review and look-back analyses in subsequent years. As noted in A27 and A64, actual economic benefit will be heavily dependent on the depth and timing of reviews required during the look-back process. Please refer to answers provided in A27 and A64 for additional context.
- Q70. At page 6 of her written testimony, Ms. Howe testifies that “[f]or a multi-year filing, the same approach showing estimates of known and measurable changes for each period will be followed.” Explain why the utility would estimate “known and measurable changes.”
- A70. Witness: Howe. The intention of that testimony was to indicate, to the greatest extent possible, the same framework used for showing known and measurable changes would be followed. For the sake of clarity, this statement is better expressed as “the same approach showing proforma changes for each period will be followed.”

- Q71. Explain how NKWD will lower its rate case expenses if it must make filings related to construction projects, O&M needs, capital projects and other areas on a yearly basis as opposed to the 18-month frame that it currently follows. Provide a detailed listing of the specific expenses that NKWD anticipates the proposed multi-year methodology will reduce and those expenses that it anticipates will increase as a result of the methodology.
- A71. Witness: Barrow. Several savings concepts are identified on page 7 of my written testimony. As noted in A27, A64(a) and A69, a formal cost-benefit analysis has not been conducted. Savings are an assumed result of reducing the frequency of full rate case proceedings, offset by the cost of administering the look-back process. The degree of economic benefit to be realized from this proposal is dependent on the timing and depth of reviews associated with the look-back process.
- Q72. At page 7 of her written testimony, Ms. Howe states that “[t]he most significant risk associated with a multi-year filing is the likelihood that, over time, actual revenue, costs and drivers could vary significantly from projections which may necessitate adjustments to ensure the financial integrity of the utility and prevent inequitable cost recovery of the cost of the approved plan. Additionally, if significant changes occurred to utility operations, the current plan may require modifications.”
- Q72(a). Describe what Ms. Howe means by “costs and drivers” and “significant changes to utility operations”.
- A72(a). Witness: Howe. “Costs” references all utility expenses recovered through proposed rates, and “drivers” references the units that influence either the cost itself, or its allocation to customer classes. “Significant changes to utility operations” refers to major operating changes such as building a new plant, merging with another utility system, or other event that have not been reflected in the plan as submitted.
- Q72(b). Describe how, in the event adjustments are required, these adjustments would be made.
- A72(b). Witness: Howe. As noted on pages 7-9 of my written testimony, the look-back adjustment would be the vehicle by which adjustments to rates by customer class would be implemented. To the extent total revenue requirements exceeded a cumulative 5 percent during the multi-year period, an event that could be prompted by a significant change in operations, a new rate case would be triggered.
- Q72(c). Describe the procedure that NKWD would follow to make these adjustments and that the Commission would follow to review these adjustments.

Q72(c). Witness: Howe. The look-back report is the vehicle by which adjustments would be proposed, to be submitted with a 6 month window for review before the next adjustment is implemented. Please refer to A31 and A32 for additional context.

Q73. At page 8 of her written testimony, Ms. Howe discusses further assumptions on the true up methodology of the multi-year mechanism. In her discussion of over-earnings, she indicates that the customer classes that provided the over-earnings would be credited for this over earnings.

Q73(a). State whether, in Ms. Howe's opinion, the customer class that created the over-earnings be given a credit on its bills.

A73(a). Witness: Howe The look-back report will identify adjustments required by class to true-up actual results to the proforma representations in the current plan. Using the existing rate structure, adjustments to the subsequent year's rates will be proposed that most completely accomplish the changes identified in the look-back analyses. In this example, the look-back adjustment would have the effect of lowering rates proposed in the original plan for the subsequent rate year, and would lower bills of the applicable class.

Q73(b). If no credit on bills is given, explain how over-earnings would be returned to the customer classes that provided the over-earnings.

A73(b). Witness: Howe. Please refer to A73(a).

Q73(c). State whether, in the event that earnings fell short of projections, the customer classes accountable for the short fall will be required to pay or otherwise cover the shortage. Explain.

A73(c). Witness: Howe. The same process described in A73a would be followed in the event that rates under-recover actual costs of service. Based on the look-back analysis, a proposed modification to the subsequent year's rates would be made to true-up results.

Q74. At page 9 of her written testimony, Ms. Howe testifies that "the overall level of effort required to conduct the look-back is considered to be substantially less than that required for a comprehensive rate case filing." Explain how this effort is "substantially less" as it appears the look-back requires as much effort to track and manage information as a rate case application.

A74. Witness: Howe. The look-back process is intended to simplify the existing framework and mitigate the need for a full rate case proceeding. While an annual look-back analysis and report will be required, it is hoped that this effort will be either a confirmation of results that were already approved, or an indication of changes required to bring results in line with the approved plan. However, as noted in multiple prior answers, the actual economic benefit of this approach is significantly dependent on the timing and depth of reviews required by the PSC to administer it.

Q75(a). Explain how new customers are considered in the multi-year mechanism.

A75(a). Witness: Howe. A growth rate of approximately 1 percent has been used for the residential and commercial customer classes for each year of the multi-year period.

Q75(b). Explain how new customers affect the revenue requirement in the multi-year mechanism.

A75(b). Witness: Howe. A proforma adjustment of 4% per year has been applied to operation and maintenance expenses. This adjustment would reflect both the impact of increased volume-related costs from new customers, as well as recognition of historical cost increases for O & M. The capital plan has been sized to accommodate expected growth within the system, and as such depreciation costs, debt costs, and coverage costs all are driven in part by growth.

Q75(c). Explain how any new customers will affect the revenue, revenue requirement and administration of the utility with the multi-year mechanism.

A75(c). Witness: Howe. The anticipated impact of new customers has been described in A75(b). To the extent actual growth rates differ, the impact of this change will be considered, among any other variance drivers, in the 5% cumulative revenue requirements threshold. If the growth variance is significant enough, a new rate case would be triggered under the proposed multi-year plan.

Q76. Provide all schedules in NKWD's Petition, Exhibit N, Cost of Service Allocations and Billing Analysis, Appendix C – "Calculations" on a computer diskette in Microsoft Excel 97 format.

A76. Witness: Howe. Exhibit N and Appendix C are provided on CD in Microsoft Excel 97 format. Please see 76.

Q77. At page 4 of NKWD’s Petition, Exhibit N, NKWD states that “analysis of water consumption and climatological data indicated rainfall in 2004 was abnormally high, which has the effect of reducing water consumption, primarily for the residential class”. Provide the sources for this information.

A77. Witness: Howe. As noted in the table below, rainfall in 2003 and 2004 was abnormally high in the Northern Kentucky area.

	Total	Dif From		% dif from
		Norm	average	average
2000	42.91	-0.85	43.76	-2%
2001	44.03	0.27	43.76	1%
2002	41.86	-1.9	43.76	-4%
2003	49.08	5.32	43.76	12%
2004	46.63	2.87	43.76	7%

The rainfall data was sourced on-line from the University of Kentucky Agricultural Weather Center.

Q78. At page 4 of NKWD’s Petition, Exhibit N, NKWD states that “[r]esidential consumption has been normalized for the current test year based on an average consumption from 2000 – 2002, prior to the abnormally high rainfall levels.” Explain why the years 2000 – 2002 were used as an average.

A78. Witness: Howe. Years 2000-2002 represent the closest period in recent history that had regional rainfall levels nearest the average. A three year average was selected to mitigate the effects of slight rainfall deviations that occurred during that period, as shown in the table in A77.

Q79. Refer to NKWD’s Petition, Exhibit N, Appendix C, Schedule 13.4. Explain why the city of Williamstown’s rainfall is used as an example.

A79. Witness: Howe. The city of Williamstown was used because the information was readily available and was geographically close to NKWD service area.

Q80. Refer to NKWD’s Petition, Exhibit N at 8.

Q80(a). Describe in detail the process that Ms. Howe used to obtain the “normalization of billable water usage.”

A80(a). Witness: Howe. As noted in the table below, we examined usage per residential customer for the 2000 through 2004 time period and detected higher usage per residential customer in the years 2000-2002 by approximately 18 Ccf/year. We have recognized approximately 9.9 Ccf/year in the normalization adjustment, or less than 2 Ccf per typical bi-monthly billing period.

Residential Customer Class (per annual PSC reports)

	<u>Usage - Mgal</u> <i>Mgal</i>	<u>Avg Accts</u>	<u>Mgal/Acct</u>	<u>Ccf/Acct</u>
2004	4,196,478	67,712	62.0	82.8
2003	3,962,000	63,828	62.1	83.0
2002	4,180,414	60,749	68.8	92.0
2001	4,325,146	57,494	75.2	100.6
2000	4,610,418	56,003	82.3	110.1
2000-2002 Results	13,115,978	174,245	75.3	101.6
Difference from 2004			13.3	18.8
Adjustment Used				9.9

Q80(b). Describe how the \$1,820,339 for volume normalization in schedule 7 was derived. Show all calculations and state all assumptions used to derive this amount.

A80(b). Witness: Howe. The 9.9 Ccf/year, as shown in A80a, is applied against bi-monthly residential test year accounts to determine the total usage adjustment of about 707,000 Ccf. Multiplying the usage adjustment against the typical block distribution for residential customers, which provides an average of \$2.57/Ccf, yields the weather normalization adjustment of \$1,820,339.

Q81. Refer to NKWD's Petition, Exhibit N at 13.

Q81(a). Explain why maximum day demands can be expected to amount to as much as 157.4 percent of average day demand levels.

A81(a). Witness: Howe. The allocation factors were determined from an analysis of 2002 recorded average day and maximum day rates of water delivered to the system and our experience with other similar water utilities. The analysis indicates that the maximum day demand for water use is about 1.574 times the average day use.

$$\text{Max Day Demand} = \text{Max Day/Average Day} = 57.3/36.4 = 1.574$$

Q81(b). Explain why maximum hour demands can be expected to amount to as much as 236.1 percent of average day demand levels.

A81(b). Witness: Howe. The allocation factors were determined from an analysis of 2002 recorded average day and maximum day rates of water delivered to the system and our experience with other similar water utilities. Detailed max hour data was not available. Experience with other utilities indicated that a factor of 1.5 applied to max day data was an appropriate estimate for max hour demand. The ratio of system maximum hour demand is estimated to be 2.361 times the average day demand.

Q81(c). Provide all calculations and state all assumptions used to determine that 63.5 percent of the capacity of facilities designed to meet maximum day demands is required for average or base use and 36.5 percent is required for maximum day extra capacity demands.

A81(c). Witness: Howe. The 1.574 maximum day to average day ratio indicates that approximately 63.5 (1/1.574) percent of the capacity of maximum day facilities is required for average or base use, and the remaining 36.5 (0.574/1.574) percent is required for maximum day extra capacity demand.

$$\begin{aligned} \text{Max Day, Base portion} &= 1/\text{Max Day Demand} = 1/1.574 = 0.635 \\ \text{Max Day, Max Day - Extra Capacity} &= 1 - \text{Max Day, Base portion} = 1 - 0.635 = 0.365 \end{aligned}$$

Q81(d). Provide all calculations and state all assumptions used to determine that 42.4 percent of the capacity of facilities is required to meet maximum hour demands for average rates of use.

A81(d). Witness: Howe. The 2.361 maximum hour to average day ratio indicates that approximately 42.4 (1/2.361) percent of the capacity of maximum hour facilities is required for base use:

$$\text{Max Hour, Base portion} = 1/\text{Max Hour Demand} = 1/2.361 = 0.424$$

Q81(e). Provide all calculations and state all assumptions used to determine that 24.3 percent of the capacity of facilities is required to meet maximum day extra capacity requirements.

A81(e). Witness: Howe. The max day extra capacity of the max hour component is approximately the portion of max day (1.574) greater than base (1.00) divided by max hour (2.361).

$$\begin{aligned} \text{Max Hour, Max Day - Extra Capacity} &= (\text{Max Day} - 1)/\text{Max Hour Demand} \\ &= (1.574 - 1)/2.361 = 0.243 \end{aligned}$$

Q81(f). Provide all calculations and state all assumptions used to determine that 33.3 percent of the capacity of facilities is required to meet maximum hour extra capacity requirements.

A81(f). Witness: Howe. The max hour extra capacity of the max hour component is approximately the portion of max hour greater than max day $(2.361-1.574=.787)$ divided by max hour (2.361) .

$$\begin{aligned} \text{Max Hour, Max Hour - Extra Capacity} &= (\text{Max Hour}-\text{Max Day})/\text{Max Hour Demand} \\ &= (2.361-1.574)/2.361 = 0.333 \end{aligned}$$

Q82. Refer to NKWD's Petition, Exhibit N at 18.

Q82(a). Explain why Ms. Howe allocated 90 percent of electric costs to base and 10 percent to maximum day.

A82(a). Witness: Howe. Power costs are primarily allocated to the base cost component. If a utility's electric rate structure includes a demand rate, a portion of the electric costs should be allocated to extra capacity. The District's electric rates include a demand charge. The District attempts to operate its facilities as effectively as possible in order to benefit from the lower average use rate; however, due to the fluctuation in customer demands, the District does experience times when they utilize energy at the peak rate. In order to recognize the costs associated with the peak electric use, 10 per cent of the total electric costs are allocated to Max Day costs.

Q82(b). Describe how Ms. Howe determined that 75 percent of flushing costs should be allocated to base and 25 percent to public fire protection.

A82(b). Witness: Howe. Flushing activities primarily benefit distribution mains; however, routine flushing activities also ensure that fire hydrants are in good operating condition. In order to recognize the benefit to both the mains and fire protection, 75 percent of flushing costs are allocated to base and 25 percent to public fire protection.

Q83(a). State whether NKWD has prepared or commissioned a demand study of its system usage since January 1, 2003.

A83(a). Witness: Howe. No.

Q83(b). If NKWD has prepared or commissioned since January 1, 2003 a demand study of its system usage, provide a copy of this study and a detailed description of how this study was used to prepare NKWD's Petition.

A83(b). Witness: Howe. Not Applicable.

Q83(c). If NKWD has not prepared or commissioned a demand study of its system usage since January 1, 2003, provide all calculations, studies, analyses and other materials used to support each capacity factor shown on Schedule 13 of NKWD's Petition, Exhibit N.

A83(c). Witness: Howe. Formal demand studies were not performed to determine customer class peaking factors. In the absence of a formal study, an analysis of monthly billing data adjusted for daily and hourly peaking relationships can be used. However, because NKWD bills over 90 percent of its customers quarterly, this methodology did not apply to the determination of peaking factors. Experience with other utilities and the industry in general together with a test for reasonableness was used to develop customer class capacity factors. A sample of utilities used is shown below.

Utility	Max Day			Max Hour		
	Residential	Commercial	Industrial	Residential	Commercial	Industrial
NKWD	1.82	1.67	1.57	3.00	2.50	2.00
Cincinnati, OH	2.57	2.28	1.71	4.40	3.30	2.48
Columbus, OH	2.25	1.50	1.25	3.50	2.75	1.75
Louisville, KY	1.44 -1.79	1.40 – 1.44	1.14 – 1.31	1.61 – 2.32	2.05 – 2.24	1.21 – 1.92
Bloomington, IN	2.25	1.75	1.80	3.80	2.75	2.25
Middletown, OH	2.25	1.50	1.25	3.50	2.75	1.75

Once demand factors were established, a test for reasonableness was also performed. The system diversity ratio defined as the noncoincidental demand, less fire protection demand / coincidental demand, less fire protection demand, fell within the acceptable range of 1.10 to 1.40. The diversity ratio for NKWD is 1.11 for maximum day capacities and 1.16 for maximum hour capacities.

Q84. Refer to NKWD's Petition, Exhibit N, Appendix C, Schedule 7, Line 3. State whether the reference to Petitioner's Exhibit K is correct. If it is not the correct reference, provide the correct reference.

A84. Witness: Howe. The reference for line 3 is an error, the details of the development of the volume normalization are addressed in A80, parts (a) and (b).

Q85. Describe the form of the notice and the amount of notice that NKWD proposes to provide its customers before implementing an annual rate revision under its multi-year rate proposal.

- A85. Witness: Barrow. Please refer to response to 34(b).
- Q86. State when under its multi-year proposal NKWD would file with the Commission all required information for an annual rate revision if the annual rate revision were to become effective on the first day of the calendar year.
- A86. Witness: Barrow/Howe. Any rate revision would be identified and filed as explained in the look back process. Please refer to response to A31.

**AGREEMENT RELATING TO SALARIES OF COMMISSIONERS
OF
THE NORTHERN KENTUCKY WATER SERVICE DISTRICT**

This Agreement is made and entered by and between the Judge/Executive of Campbell County, Kentucky, 24 W. Fourth Street, P.O. Box 340, Newport, Kentucky 41072 and the Judge/Executive of Kenton County, Kentucky, 303 Court Street, P.O. Box 792, Covington, Kentucky 41012-0792, with the approval of the Campbell County Fiscal Court and the Kenton County Fiscal Court.

W I T N E S S E T H:

WHEREAS, the Northern Kentucky Water Service District (hereinafter the "District") is a water district organized and operating under Chapter 74 of the Kentucky Revised Statutes; and

WHEREAS, the District is a multicounty water district to which the commissioners are appointed by the Judge/Executive of Campbell County and the Judge/Executive of Kenton County with the approval of their respective fiscal courts; and

WHEREAS, the 1998 General Assembly of the Commonwealth of Kentucky amended KRS 74.020 to allow county judges/executive, with the approval of their fiscal courts, to increase the annual salary of water commissioners from \$3,600.00 to \$6,000.00, provided that the increase is contingent upon the completion of minimum training requirements; and

WHEREAS, the Judge/Executive of Campbell County and the Judge/Executive of Kenton County, with the approval of their respective fiscal courts, desire to increase the annual salaries of the Commissioners of the District contingent upon the satisfaction of the minimum training requirement set forth in KRS 74.020;

NOW THEREFORE, in consideration of the premises and of the covenants and agreements hereinafter set forth, the Judge/Executive of Campbell County and the Judge/Executive of Kenton County, with the approval of their respective fiscal courts, agree as follows:

1. Commencing on the effective date of this Agreement, the annual salary of the Commissioners of the District shall be increased to \$6,000.00 for each Commissioner who completes during an educational year a minimum of 6 instructional hours of water district management training approved by the Public Service Commission. An educational year shall begin on January 1 and end on the following December 31.

2. In order to qualify as water district management training for purposes of this Agreement, the training must be approved by the District and must satisfy the standards for training established by the Public Service Commission.

3. The cost of all water district management training for Commissioners of the District shall be paid for by the District.

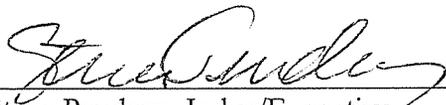
4. Commissioners of the District who do not complete a minimum of 6 instructional hours of water district management training during an educational year shall receive for that year an annual salary of only \$3,600.00.

5. The salaries of all Commissioners of the District shall be paid out of the water district fund.

6. This Agreement shall become effective on the date last written below and shall continue in full force and effect until amended by the Judge/Executive of Campbell County and the Judge/Executive of Kenton County with the approval of their respective fiscal courts.

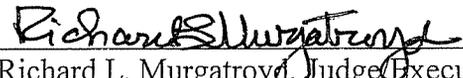
IN WITNESS WHEREOF, the Judge/Executive of Campbell County, with the approval of the Campbell County Fiscal Court, and the Judge/Executive of Kenton County, with the approval of the Kenton County Fiscal Court, have hereunto set their hands on the dates below indicated.

CAMPBELL COUNTY


Steve Pendery, Judge/Executive

Date: October 7, 1999

KENTON COUNTY


Richard L. Murgatroyd, Judge/Executive

Date: September 28, 1999

